

ABSTRACT

A drainpipe cleaning apparatus prevents leakage of cleaning fluid from the drainpipe while cleaning the drainpipe. The drainpipe cleaning apparatus 1 has a cleaning fluid tank 10 for storing the cleaning fluid, a fluid delivery line 15, fluid drain line 23, gas-liquid separation tank 24, gas exhaust line 26, circulation line 28, gas recovery line 31, cleaning fluid return line 33, and control device 45. The control device 45 runs a cleaning process by driving a gas discharge pump 36 to create negative pressure inside the wastewater drainpipe 2 in a transit vessel and driving a cleaning fluid pump 16 to cause the cleaning fluid to flow backwards through the wastewater pipe 2. The control device 45 also monitors the pressure detected by an inlet-side pressure detector 20 during the cleaning process. If the detected pressure exceeds atmospheric pressure, the control device 45 runs a cleaning fluid recovery process that stops the cleaning fluid pump 16, closes the discharge valve 19, opens the cleaning fluid return valve 34, opens the release valve 27, and closes the gas recovery valve 32 so that cleaning fluid in the wastewater pipe 2 flows back through the fluid delivery line 15 and cleaning fluid return line 33 and is recovered in the cleaning fluid tank 10.